REMARKS

Claims 1, 2, 6, 10 and 14 have been cancelled as drawn to the previously elected invention. Claims 3, 4, 5, 7-9, 11-17, 19 and 20 are currently under examination in the present application. Claims 1-17, 19 and 20 have been rejected. No new matter has been added. Applicants reserve the right to refile this subject matter in a continuation or divisional application filed during the pendency of this application.

Rejection under 35 U.S.C § 101

Claims 1, 2, 6, 10 and 14 were rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1-5 of U.S. Patent No. 6,258,603. Claims 1, 2, 6, 10 and 14 have been cancelled, thereby rendering the rejection moot. Withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 112(1)

Claims 1-17 and 19 were rejected under 35 U.S.C. § 112 first paragraph as the specification is enabling for a method to modulate gene expression *in vitro* or in a plant, it does not reasonably provide enablement for the method practiced in animals *in vivo*. Claims 1, 2, 6, 10 and 14 have been cancelled, thereby rendering the rejection of these claims moot.

The Examiner rejected the claims, specifically in regards to using the claimed invention in a multicellular organism other than a plant *in vivo*, as the specification contemplates only gene therapy. Applicants contend that it is understood in the relevant art that the use of a method to modulate gene expression in multicellular organisms does not apply only to gene therapy. It is well known and appreciated to those of skill in the art how to utilize gene expression systems in non-plants, *in vivo*, which would include use of such method in both transgenic animals and non-transgenic animals. Applicants assert that the specification teaches the use of the claimed method to modulate gene expression *in vitro* and *in vivo* in plants and animals (subjects). The specification defines, on page 9, lines 30-31, that the term "subject" means an intact plant or animal or a cell from a plant or animal. The specification describes, in the Examples, the use of the method of the present invention in various cell lines, specifically the CHO mammalian cell line and the Kc167 insect cell line. The use of the method to modulate gene expression of the present invention in a multicellular

organism is also contemplated within the specification. The specification describes the use of the present method to modulate gene expression in transgenic organisms. Page 1, lines 8-14, of the specification describes that the use of temporal control of gene expression is known to be valuable for mammalian applications such as inducible gene targeting, overexpression of toxic and teratogenic genes, anti-sense RNA expression and gene therapy. The specification, page 1, lines 17-19, further states that "for both animals and plants, inducibility can be valuable for foreign protein production, for example, therapeutic proteins, industrial enzymes, polymers, and the like." Likewise, the specification on page 7 describes the complementary techniques used in the transformation of animal cells and regeneration of such transformed cells in transgenic animals. Further teachings in the specification can be found at page 9, where it is taught that use of eukaryotic cells is preferred because they naturally lack the molecules which confer responses to the ligands for the ecdysone receptor, and as a result they are insensitive to the ligands of the invention.

Thus the Examples in the present application of *in vitro* mammalian gene expression, the teachings in the specification on how to use the gene expression method, and the high level of knowledge and skill in the art, provide sufficient disclosure of the manner in which the present invention can be made and used. In view of the foregoing, Applicants submit that the present specification provides reasonable enablement to one of skill in the art to make and use the instant invention, and meets the requirements of 35 U.S.C. § 112, first paragraph. Accordingly, withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 102(a)

Claims 1-17 and 20 were rejected under 35 U.S.C. § 102 (e) as anticipated by Albertson *et al.* (U.S. Patent No. 6,504,082, effective filing date 9/10/1998). Claims 1, 2, 6, 10 and 14 have been cancelled, thereby rendering the rejection of these claims moot. The Examiner suggests that the claims are anticipated by Albertson *et al.* because the reference teaches a method to modulate exogenous gene expression comprising contacting a complex comprising a DNA binding domain, a ligand binding domain, a transactivation domain and a ligand with a DNA construct comprising the exogenous gene under the control of a response element.

Applicants contend that the teachings of Albertson *et al.* are anticipated by the priority provisional application 60/089,546 filed June 17, 1998. The claims of the present application, specifically the method to modulate exogenous gene expression comprising contacting a complex comprising a DNA binding domain, a ligand binding domain, a transactivation domain and a ligand with a DNA construct comprising the exogenous gene under the control of a response element, are supported in priority applications 60/089,546 and 09/210,010. The ligands contemplated within the method claims of priority applications 60/089,546 and 09/210,010 are still explicitly described and claimed in the present divisional application. Therefore the present claims, for specifically the shared teachings (method of modulating gene expression and certain species of ligands), should enjoy the benefit of the priority applications for those particular teachings.

The specification and claims of priority applications 60/089,546 and 09/210,010 describe, teach and claim a method to modulate exogenous gene expression comprising contacting a complex comprising a DNA binding domain, a ligand binding domain, a transactivation domain and a ligand with a DNA construct comprising the exogenous gene under the control of a response element. The priority applications describe, teach and claim the use of the ligand, methoxyfenozide, as contemplated by Albertson *et al.* Albertson *et al.* only test tebufenozide, which the present application, as well as the priority applications, do not claim and actually teach away from. The priority and present applications describe, teach and claim the use of ligands with improved characteristics over tebufenozide. The priority applications explicitly described and claim the use of the preferred compound, methoxyfenozide, as well as improvements over the compound (tebufenozide) tested in Albertson *et al.* Thus, the instant application should enjoy the benefit of the priority application for the method of modulating gene expression and use of the compounds explicitly and implicitly taught. Therefore, the Albertson *et al.* reference should not be considered as prior art for the teachings it is relied upon for.

In view of the foregoing, Applicants submit that Albertson *et al.* do not anticipate the present claims for the reasons stated above, and accordingly withdrawal of the rejection is respectfully requested.

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance. Therefore, Applicants respectfully request reconsideration and withdrawal of all of the above rejections.

Respectfully submitted,

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